



3 Ton Round Bottom Long Ram Hydraulic Jack

Model 36396

ASSEMBLY & OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our Web site at <http://www.harborfreight.com>

**TO PREVENT SERIOUS INJURY,
READ AND UNDERSTAND ALL WARNINGS
AND INSTRUCTIONS BEFORE USE.**

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For technical questions and replacement parts, please call 1-800-444-3353

THANK YOU for choosing a **HARBOR FREIGHT TOOLS** product. For future reference, please complete the owner's record below:

Model _____ **Serial No.** _____ **Purchase Date** _____

SAVE THE RECEIPT, WARRANTY AND THESE INSTRUCTIONS. It is important that you read the entire manual to become familiar with the unit BEFORE you begin assembly.

Technical Specifications

Finish:	Baked enamel
Capacity:	3 Ton
Maximum Height:	44-1/2"
Minimum Height:	24"
Stroke:	20"
Shaft Diameter:	1-7/64"
Pinhole Size:	5/8"
Weight:	27-1/2 LBS.

The Round Bottom Jack is ideal for use on hydraulic cranes and engine hoists. The Jack has a 20" stroke for jobs requiring a large lift.

Safety Warnings and Precautions

WARNING: When using product, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this product!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Keep work area well lit.
3. **Store idle equipment.** When not in use, the Hydraulic Jack or the product it mounts on must be stored in a dry location to inhibit damage from moisture and salt air.
4. **Check for damaged parts.** Before using the Hydraulic Jack, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for any broken or damaged parts and any other conditions that may affect its operation. Replace or repair damaged or worn parts immediately.
5. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty.
6. **Do not force product.** Do not use inappropriate attachments in an attempt to exceed the Hydraulic Jack's lifting capacity.
7. **Use the right product for the job.** Do not attempt to force a small Jack or attachment to do the work of a larger industrial Jack. There are certain applications for which this Jack was designed. Do not modify this Jack and do not use this Jack for a purpose for which it was not intended. Do not use on airplanes. Never attempt to install a base onto this Jack.
8. **Use eye and ear protection.** Always wear ANSI approved impact safety goggles when installing or using this product.
9. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when installing or using this product. Wear restrictive hair covering to contain long hair. Wear gloves to protect hands.

10. **Keep children away.** Children must never be allowed in the work area.
11. **Do not overreach. Keep proper footing and balance at all times. Do not reach over or across the Jack during use.**
12. **Never leave the product unattended while supporting an object.**
13. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before operating.
14. **Never place your hands or other body parts near a hydraulic fluid leak.** Never check for a leak with your hands or other body parts. High-pressure fluid can be forced under your skin resulting in serious injury.
15. **Always make certain that the Hydraulic Jack and the product it is used with are set on a flat, level and secure surface that is capable of supporting the combined weight of the Hydraulic Jack, accompanying accessories and the weight of any material that is moved or lifted. Make certain that the Jack is undamaged and mounted securely before use.**
16. **Read and adhere to the entire owner's manual of any product that is used with the Hydraulic Jack.**
17. **Always use the Jack within its rated weight load capacity, (3 tons = 6,000 Lbs.).**
18. **The Jack is designed for lifting only.** Always use stationary supports after object is lifted. Avoid using the Jack on slanted surfaces. Loading should be centered on the ram perpendicular to the base.
19. **Never put any part of your body under any object supported by the Jack at any time.**
20. **Not to be used for aircraft purposes.**

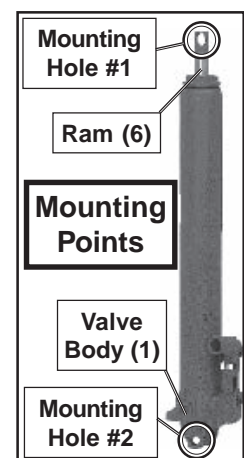
Warning: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Assembly/Operation

**NEVER operate the Jack with low or no hydraulic oil
(see section on "Adding Hydraulic Oil", page 4).**

Your 3 Ton Long Ram Round Bottom Hydraulic Jack will require complete assembly and installation prior to use. It is important that you read the entire manual to become familiar with the product BEFORE you assemble and use the Hydraulic Jack. Before assembling and operating the Hydraulic Jack be sure that you have all parts described in the Parts List and Assembly Diagram located on the last pages of this manual.

1. Attach the Hydraulic Jack to the product you are using. Secure the Valve Body (1) to the product by inserting a pin (not included) through the holes in the Valve Body (1) and properly securing it, **(See Mounting Hole #1, right)**. Slide another pin (not included) through the product and Ram (6) **(See Mounting Hole #2, right)**, securing it as well. Make sure the pins' diameters are a push fit with just enough clearance so they move freely. The pins should be held in place with appropriate e-clips or hardened cotter pins (neither one included).



Note: Only use pins that are intended for supporting this type of Jack, are capable of supporting 3 Tons, and ensure that the pins are properly secured before use.

Note: This Jack is not intended for horizontal use.

2. Insert the Handle (26) into the Handle Socket (27).

Raising and Lowering

1. To raise the Hydraulic Jack turn the Release Valve (18) clockwise until the valve is tightly closed. Pump the Handle (26) to raise the Jack. Continue to pump the Handle (26) until the Hydraulic Jack is at the desired height.
2. To lower the Jack, first verify that the area under the object is clear, then turn the Release Valve (18) counterclockwise. This will release pressure in the Jack and cause the Jack to lower.

Adding Hydraulic Oil

1. Turn the Release Valve (18) counterclockwise until Jack is completely lowered. Remove the Oil Plug (11) from the Oil Chamber (10). **Fill the Oil Chamber (10) with oil. Use a high quality hydraulic oil. Note: The capacity of the oil chamber is 17.6 ounces.**

Hydraulic System Bleeding Instructions

If the Hydraulic Jack begins to lose power and efficiency, it may be a result of air being trapped in the hydraulic system. Follow the steps shown below to bleed the air from the hydraulic system.

Caution: Make certain that the Hydraulic Jack is not under load while bleeding the system.

1. Remove oil chamber's Oil Plug (11).
2. Pump the Handle (26) to raise the Jack to its highest position. Open the Release Valve (18). Release the Handle (26) to lower the Jack. Repeat pumping the Handle a number of times to force the hydraulic oil through the system.
3. **Top off the oil chamber with hydraulic oil.** Tighten the Oil Plug (11). The bleeding process is now complete.
4. Test the Hydraulic Jack to be certain it is working properly. Only proceed after you ensure that it is working properly.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Unpacking

When unpacking your 3 Ton Long Ram Hydraulic Round Bottom Jack, check to make sure the following parts are included. If any parts are missing or broken, please call **HARBOR FREIGHT TOOLS** at 1-800-444-3353.

Part #	Description	Qty.	Part #	Description	Qty.
1	Valve Body	1	17	Seal Ring	1
2	Copper Washer	1	18	Release Valve	1
3	Cylinder	1	19	Steel Ball	1
4	O-Ring	1	20	Copper Washer	1
5	O-Ring Retainer	1	21	Pump Cylinder	1
6	Ram	1	22	O-ring	1
7	Top Nut	1	23	Back Up Ring	1
8	O-Ring	1	24	Plunger	1
9	Sealing Gasket	1	25	Link Pin	1
10	Oil Chamber	1	26	Handle	1
11	Oil Plug	1	27	Handle Socket	1
12	Seal Ring	1	28	Connecting Pin	3
13	Tube	1	29	Cotter Pin	3
16	Steel Ball	1			

Note: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

Assembly/Parts Diagram

